

## **Abstract**

When wireless communications systems are operating in the same  
5 general area, collisions between their transmissions are bound to occur.  
The collisions reduce the performance in the networks. In some wireless  
communications systems that use a fixed or prespecified transmission  
frequency pattern, a look-ahead technique that investigates the quality of  
the communications channel at the upcoming transmission frequencies can  
10 be used to allow or disallow transmissions. Additionally, a maximum length  
of a transmission can be determined based on the quality of the  
transmission frequency. Finally, if the communications system is controlled  
by a centralized controller, moving the controller away from sources of  
interference will often improve performance.